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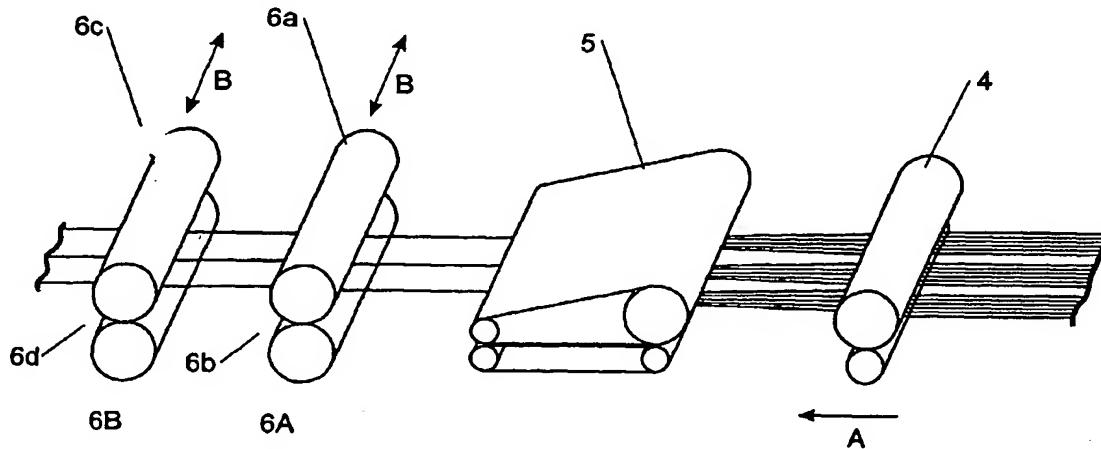
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For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: APPARATUS FOR PRODUCING A YARN



(57) Abstract: An apparatus for producing a yarn including reciprocating twisting stage (4) adapted to simultaneously twist one or more slivers to produce one or more twisted strands, including one or more rollers (6a, 6b) arranged to move reciprocally (B) along the axis of rotation of the roller(s) to input twist to the sliver(s), and control means enabling control and variation of one or more of: (a) rotation speed of the rollers(s); (b) extent of transverse movement of the roller(s); or (c) speed of the transverse movement of the roller(s), to vary the twist imparted to the sliver(s) or strand(s).

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INTERNATIONAL SEARCH REPORT

International application No.

PCT/NZ2003/000253

A. CLASSIFICATION OF SUBJECT MATTER

Int. Cl. 7: D01G 1/08, D01H 1/11

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
DWPI: IPC D01H, D02G, and keywords; yarn, strand, sliver, roller, bobbin, reciprocate, oscillate, distance, range, extent, throw, vary, alter, differ, speed, velocity and similar terms

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	AU 288664 B (51009/64) (COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION) 27 April 1967 See Item 6, Fig 1	15
Y	AU 405827 B (9432/66) (COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION) 13 February 1969 See Fig 6	12
Y	See item 11, Fig 1	15
X	AU 26099/67 A (COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION) 26 September 1968 See page 5, lines 23 to 26; page 8, lines 6 to 20;	1, 3, 4, 8, 9, 12
Y		10, 12, 15

 Further documents are listed in the continuation of Box C See patent family annex

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"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	AU 455170 B (25258/71) (COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION) 10 August 1972	
A	AU 488616 B (80014/75) (COMMONWEALTH SCIENTIFIC AND INDUSTRIAL RESEARCH ORGANISATION) 14 October 1976	
Y	NZ 336048 A (LEE) 8 January 2001 See page 2, lines 20 to 26;page 4, lines 25 to 28.	10
Y	See item 5, Fig 2	15

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/NZ2003/000253

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Member
AU	51009/64	NONE
AU	9432/66	NONE
AU	26099/67	BE 717935
AU	25258/71	NONE
AU	80014/75	NONE
NZ	336048	NONE

END OF ANNEX